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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,057	06/30/2000	Steve Kakouros	10004812-1	9467
7590	12/02/2005		EXAMINER	
HEWLETT-PACKARD COMPANY Intellectual Property Administration P.O. Box 272400 Fort Collins, CO 80528-9599			CUFF, MICHAEL A	
			ART UNIT	PAPER NUMBER
			3627	

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/608,057	KAKOUROS ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Michael Cuff	3627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 12 May 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-21 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

**DETAILED ACTION**

***Examination***

The office apologizes for delay in prosecution in this application. The application status was inadvertently put into a status such that the application did not show up on the examiner's docket. Please feel free to call the examiner to facilitate future prosecution.

To review the prosecution of this application, an appeal brief has been submitted based on the obviousness rejection of Garg et al. in view of Salvo. The examiner concurs with applicant that this combination cannot properly be combined because Garg et al. deals with "holding cost" to determine safety stock and does not use prices of products on the spot-market. The price of the products would be necessary for the combination to make sense because that is what Salvo provides.

The examiner and the attorney of record have tried to work out an amendment to make the claims allowable, entered in the record 5/12/05. This action will address the claims of record, dated 3/24/03, and will address the arguments of the proposed independent claim, which is almost the same as claim 21.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-14 and 18-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Per MPEP 2106, "The claimed invention as a whole must produce a "useful, concrete and tangible" result to have a practical application. In claim 1, there is only the abstract step of "planning" does not meet this criteria. This can be easily resolved as shown in the proposed claim where the step is "computing a safety stock level". The safety stock level is concrete and tangible. Claim 2 presents the same problem with the steps of "estimating". This step does not meet the above requirement either. "Calculating an estimate ..." could be in the statutory realm. It should be noted that "estimating" may not be reproducible and therefore not patentable subject matter. "Providing an estimate" may also have the same problem. Also note that claims 15-17 have the steps of "ordering", which is useful and tangible, and are therefore statutory subject matter.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "a safety stock level". There are several safety stock levels discussed in the specification. It is not clear which safety stock level this is. It cannot be the maximum safety stock level or the optimal stock level from the context of the specification. The examiner's best guess is that applicant meant this safety stock level in the optimal level of safety stock ( $q_{\text{safety, optimal}}$ ). However, while this level is mentioned on page 17, it is just a reduced amount of a pre-determined safety stock and not a safety stock level. The specification and drawings do show an optimal quantity to purchase on the spot market ( $q_{\text{spot, optimal}}$ ).

***Claim & Specification Notes***

Claims 3-7 and 13 are not written directly as method steps. Because the claims have other problems, it is not clear that they should be rejected under 112. However, the claims would be much better if they written specifically adding or modifying a step in the process.

In the specification, on page 8, in the amended section, describing figure 5, It is not clear what exactly is going on. For example, what is ( $C_{\text{safety}}(q_{\text{spot}})$ )? The claims are drawn to planning a safety stock, but it appears that the safety stock and the cost thereof is already defined by the product cost of the non-spot market inventory. Is this a cost per item or actual total cost? Please define the terms in figure 5 more clearly. In the proposed claim, it recites, “computing a safety stock level ...”. It does not appear that the disclosure computes a “safety stock level”, but does compute an amount a safety stock level could be reduced. The initial safety stock level is predetermined and guessed or estimated, but not calculate. Therefore, a final or reduced safety stock level cannot be calculated either.

The specification uses the terms “product cost” and “cost of obtaining product”. Are these the same terms? Or is the “cost of obtaining product” the administrative and holding cost, which does not include the price of the product?

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brinkley et al. in view of Salvo.

Brinkley shows all of the limitations of the claims except for specifying that the planning of a safety stock level based on the use of product availability from the spot market and non-spot market and the use of web based supply ordering.

Brinkley et al. shows, figures 4 and 6, an inventory management system. One of the first decision points in the Brinkley system is to compare average order cost to a cost limit (column 10, line 15). The average order cost of the inventory item is the total dollar sales (product cost for spot and non-spot market items) for the total period surveyed divided by the total number of orders for the item during that period. Under some strategies the safety stock (SS) level can be calculated as shown in column 13, line 10 (maximum safety stock level). Under other strategies, where the supply lead time is less than the customer requirement interval, the SS level is 0 (optimal SS level).

In regards to claims 3-8 and 10-14, see input and output data of figures 4 and 6.

In regards to claim 9, column 1, line 30 recites, "Also important is the availability of alternate suppliers and substitutability of goods." For planning and estimating purposes, it is obvious that one could review many combinations of suppliers.

Salvo et al. teaches, figure 1, a inventory management system where the inventory price source module 126 searches for and compares buying options in order to optimize purchase value. The inventory price source comprises at least one of economic indicators, economic models, commodity pricing indexes, spot market pricing, Dow Jones information, other market information, and other inventory price sources (non-spot market pricing). The control unit 114 stores and analyzes historical trends of inventory prices to determine analyzed inventory price trends. The Salvo system also makes wide use of web base technology (web sites) for automatic ordering in order to take advantage of current technology.

Based on the teaching of Salvo et al., it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify Brinkley et al. system to incorporate the inventory price source module of Salvo et al. as a source for many set of input values in the Brinkley et al. process which plans safety stock levels in order to optimize purchase value. It would have also been obvious to Brinkley et al. to incorporate Salvo's use of web base technology (web sites) for automatic ordering in order to take advantage of current technology.

### ***Response to Arguments***

Applicant's arguments with respect to all claims have been considered but are moot in view of the new ground(s) of rejection.

In regards to applicant's arguments contain in the e-mail correspondence. The arguments have been clearly rebutted in the rejection.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Cuff whose telephone number is (571) 272-6778. The examiner can normally be reached on 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on (571) 272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Michael Cuff 11/25/05*  
Michael Cuff  
November 25, 2005